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PRIME MINISTER

ELECTRICITY PRIVATISATION AND NUCLEAR POWER

I mentioned to you earlier in the week that you were running into major difficulties on the handling of nuclear power in relation to electricity privatisation. I have fixed up a meeting for next Tuesday with John Wakeham, John Major, Nick Ridley and Malcolm Rifkind.

John Wakeham has this evening sent in the minute and paper at Flag A. The paper is not particularly well written. But in view of the seriousness of the issues raised and the radical change of policy involved in the recommendations, I think you will want to go through it carefully.

The proposals are:

- all nuclear in England and Wales should now be retained in the Public Sector. You had decided in July that only the Magnox Stations should be retained; but it is now proposed that the AGRs and Sizwell B PWR should stay.
- No further PWRs should be built at this stage.
- The position of the Scottish nuclear stations is still to be considered.
- Early decisions and announcements are essential if we are to stick to the privatisation timetable.

Richard Wilson has been in close touch with the Department of Energy during the week and has put together an initial brief at Flag B. This brings out all the key issues. The Policy Unit will be preparing briefing at the beginning of next week.

PLC.

PAUL GRAY
3 NOVEMBER 1989
a:nuclear.mrm

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PRIME MINISTER

COPY NO 1 OF 7

ELECTRICITY PRIVATISATION AND NUCLEAR POWER

In my minute to you of 26 September, I referred to the difficulties we faced in taking forward the contracts for supply for power from the AGR and PWR stations. National Power have at last put forward proposals, following discussions with banks.

National Power insist that:

(i) without massive Government financial guarantees, going far beyond our current proposals for support, it will not be possible to raise private sector finance for the PWR programme beyond Sizewell B;

(ii) responsibility for further substantial risks from the back-end of the nuclear cycle for all types of reactors should be borne by Government after NP have paid the best current estimate of costs at the time of generation.

(iii) even with this support, and taking the most favourable assumptions about the price of nuclear electricity, the average nuclear price would be of the order of at least 5.5p/kwh at vesting in March 1990, or nearly twice the fossil price of around 3p/kwh. On that low price assumption, the levy could be a little less than the 0.6p/kwh or 15% assumed by my predecessor in June. If we were to press our current proposals for risk-sharing and support, prices would be higher;

Under pressure from my Department, NP have modified their proposed indicative prices for nuclear power. AGR quotations for the period 1990-91 to 1993-94 range from an average of 5.5p to an average of more than 8p; PWR quotations for 1996-97 to 2000-01 show a narrower range around 7-7.5p/kwh.

NP's lower AGR prices would enable us to achieve the levy and pricing effects assumed by my predecessor in June. PWR prices have to be sufficient to recover very high capital cost yet to be incurred. The difficulties that face us are both the cost of nuclear power and the risks associated with it.

My financial advisers point out that given that uncontrollable costs account for a high proportion of nuclear costs, even if the initial level of prices was acceptable in terms of overall electricity prices, markets would not accept that nuclear prices would not rise substantially in future. This would be reflected in the perceived prospects for the companies in the industry, and, therefore, proceeds.

I am forced to conclude that so long as nuclear remains substantially more costly than fossil power, the banks will see investing in a nuclear construction programme as a high risk venture. The high return they will require will push prices up, making the non fossil market look difficult to sustain. Parties will then seek reassurance from the Government to such an extent that the projects are effectively moved into the public sector. Without far reaching Government protection, it will not be possible to finance the PWRs in the private sector.

I attach a paper which discusses the issues in more detail and considers options. In drawing up this paper, I have had particularly in mind the need to meet the following objectives:

(i) to complete electricity privatisation within the lifetime of this Parliament

(ii) in doing so, to avoid real increases in average electricity prices on vesting, as set out in my predecessor's paper of 14 June

(iii) to ensure a continuing diversity in electricity supply, with a continuing substantial contribution from nuclear power and the ability to bring forward new nuclear capacity when needed

(iv) to promote the entry of independent generators into the market.

We cannot risk failing to meet these objectives. The timetable for vesting is now extremely tight. An impasse has been reached over nuclear power. The Magnox situation cannot be resolved in a satisfactory manner. National Power insist on guarantees in respect of AGRs and PWRs which I cannot recommend should be given, while the Area Boards and our financial advisers are seriously concerned that the fossil levy will undermine the market for electricity, and that the introduction of PWRs later in the 90s will make matters worse.

I recommend that while maintaining the strategic position of nuclear power by means of the Non Fossil Obligation (NFFO) and fossil fuel levy, we should not require NP to proceed with the 3 post Sizewell B PWRs and should establish a Government-owned company to take over all of the CEGB's nuclear assets and liabilities. I further recommend that we should make it clear that we would not intend to ask the Government owned company to proceed with those projects for some years.

I do not underestimate the difficulties of this course. In particular, it will be vital to take the unions with us. I shall need to extend to all staff involved the commitments given by my predecessor in his statement of 24 July. However, in my view, this is the only way to resolve the nuclear impasse consistent with meeting the timetable for electricity privatisation.

I am copying this minute to John Major, Nicholas Ridley, Malcolm Rifkind, Professor Brian Griffiths and Sir Robin Butler.

JOHN WAKEHAM

(Approved by the Secretary of State and signed in his absence)

3 November 1989

ELECTRICITY PRIVATISATION AND NUCLEAR POWER

INTRODUCTION

1. My minute of 26 September drew attention to the difficulties we faced in resolving nuclear issues within the timetable required to meet our objectives. Our objectives are:

(i) to complete electricity privatisation within the lifetime of this Parliament

(ii) in doing so, to avoid real increases in average electricity prices on vesting, as set out in my predecessor's paper of 14 June

(iii) to ensure a continuing diversity in electricity supply, with a continuing substantial contribution from nuclear power and the ability to bring forward new nuclear capacity when needed

(iv) to promote the entry of independent generators into the market.

2. In pursuing these objectives, we have encountered a number of problems, to which this paper proposes solutions.

PWR FINANCING

What about France? Belgium? Japan?

3. Nuclear power is uneconomic. This is apparent to the bankers from whom NP are seeking finance for the PWR programme. Frequent successive revelations of increased NP nuclear costs have substantially reduced confidence that nuclear power can be made to function in a normal commercial way. The market perception is that costs are uncontrollable. The offer document prepared by Lazards for NP (extracts at Annex A) refers to "the long tail of backend liabilities of nuclear power which provide little incentive to own nuclear stations, as the potential liabilities are unlimited". Against this background, our advisers consider that it will not be possible to obtain bank finance for the 3 post Sizewell B PWRs unless the Government removes all significant risk from NP and the banks.

4. To obtain bank finance for Sizewell B by March 1990 is likely to require significant Government underwriting too.

NUCLEAR LIABILITIES

i) MAGNOX

5. I reported to you on 26 September that I have been trying to find a means of maintaining safety standards at the Magnox stations while ensuring that the Government can get proper

economic benefit from them. NP's preferred solution involves them running the stations and securing most of the benefits with the Government meeting the liabilities. This approach raises problems of public accountability. Moreover, NP have not been able to satisfy me that their proposal could be legally implemented within the Electricity Act. Other solutions involve splitting the business and the technical back up in National Power (Nuclear), between Magnox and "other" nuclear business which is bound to be intensely complicated and time consuming. Even with National Power's whole hearted co-operation, which is far from assured, there must be a serious risk that a solution of this kind will simply not be capable of achievement by vesting day at the end of March.

ii) AGR & PWR

6. The Government is already offering very substantial protection to NP against loss of profit arising from changes in back-end nuclear costs after customers have been charged. However, Lord Marshall is insisting AGR and PWR fuel should be owned by BNFL, thereby making the fuel and the waste management and disposal consequences effectively public sector property. He also proposes that power station decommissioning should become a public sector responsibility. I consider that this would not be privatisation in any meaningful sense of the term.

NUCLEAR ELECTRICITY PRICES

7. The paper circulated by my predecessor on 14 June assumed as part of an overall prices and contracts package that the price of nuclear power on vesting in 1990 could be negotiated down to around 6.25p/kwh to 6.5p/kwh, compared with an average price for fossil generated power of around 2.9p/kwh. On that basis, the fossil fuel levy would average 0.6p/kwh, or 15% on the value of final sales to customers. Average prices to domestic and commercial customers would rise on vesting by about the rate of inflation, but large industrial customers would be likely to face significant real increases.

8. In the longer run, it was expected that the price of nuclear electricity would fall as PWRs came on stream, largely replacing the Magnoxes by the end of the century as they came to the end of an assumed 30 year life.

i) PWR PRICES

9. On 11 October, NP finally put forward indicative prices for PWR power. These are considerably higher than were expected when my predecessor's paper was prepared, and NP warn that prices will need to be higher still unless their demands are accepted. These include:

- all back end liabilities that cannot be passed immediately on to customers to be met by Government

- payment to be made by distribution companies to NP even if there is no output

- Government to bail out NP and banks if distribution companies default on contracts, or if the Non Fossil Obligation and/or levy is abolished

- NP to be protected against the effects of changes in the safety and environmental regulatory regime

- all cost over-runs to be passed on: no construction risk to be taken by NP, despite the fact that PWRs are not dissimilar in many respects to other major engineering projects

- no recourse to NP for lending banks.

10. NP have given us indicative prices based on their assumptions. Their lower range starts at 7.3p/kwh in 1996-97, falling to 6.8p/kwh by 2000-01. These are substantially higher than the costs which NP quoted to the Hinkley Inquiry, which on a comparable basis were 4.13p/kwh, and are over twice as high as

fossil prices. Key factors in the difference between these prices and the costs quoted at Hinkley C are:

(i) NP and their advisers believe that a higher rate of return than that assumed at Hinkley is needed even if they and their bankers face little risk. This adds over 1p/kwh;

(ii) capital costs are rising: witness the increase of 10% (£180 million) in the expected cost of Sizewell B of which NP have recently told us. NP warn that quite apart from the sheer complexity of designing and building nuclear power stations, the civil construction boom is pushing costs up. Higher capital costs add a further 0.5p/kwh

(iii) the large overheads associated with nuclear power are being taken more fully into account: this adds 0.7p/kwh.

These prices may not be unreasonable in themselves for a private sector utility building PWRs in UK conditions.

ii) AGR PRICES

11. Under pressure from my Department, NP have in the last few days produced new, lower indicative prices for AGRs - starting at 5.96p/kwh in 1990-91 and falling to 5.20p/kwh by 1993-94. This is done by extending the lives of the stations for 20 to 25 years, writing down their value to a PWR valuation, and assuming that BNFL's fuel service prices are reduced by 10%.

12. The key point is that all NP's quotations assume complete Government protection against all costs not met by customers at the time of generation, so that waste management and disposal and power station decommissioning become in effect Government responsibilities.

DISCUSSION

ACCOUNTING APPROACH TO PRICES

13. I have considered whether we could achieve an acceptable level of private sector nuclear prices by:

(i) pressing National Power hard to reduce the costs implicit in their prices, backed up by an independent scrutiny of these costs;

(ii) writing down the asset values of the AGRs and writing off a proportion at least of the expenditure incurred to date at Sizewell B.

14. The lower quotations produced in the last few days by NP show that this approach can produce an initially acceptable level of nuclear prices. However, it suffers from a number of drawbacks:

(i) it would not deal with the possibility that nuclear costs might rise subsequently to unacceptable levels either because of poor cost control by NP or higher fuel cycle costs;

(ii) because of (i), NP and the financial community would still insist on major extensions in the degree of Government support;

(iii) we would remain open to constant prevarication by NP on the level of support and other aspects of the nuclear package, which would put the timetable severely at risk;

(iv) the clear implication would be that PWRs beyond Sizewell B would not be built by a private sector company unless there were a very substantial

improvement in the economics. Such an improvement seems remote at present.

ACCEPT NP'S DEMANDS?

15. NP's indicative prices depend on the acceptance of their demands for protection against commercial, nuclear and political risks. I have considered whether, in order to achieve agreement now on these prices, which are lower than those quoted a few weeks ago, I should recommend acceptance of NP's demands. The most important of these are set out in paragraph 9.

16. The effect of this would be that, in addition to what colleagues have already agreed should be offered, the Government would enter into at least the following specific contractual commitments:

(i) with banks, to pay them in the event that the distribution companies defaulted on PWR contracts; the event of default would be insolvency of a distribution company; NP could sue in less severe circumstances

(ii) with NP (and probably the distribution companies) to indemnify them in the event of a future Government's abolishing the NFFO or the levy

(iii) with NP, to meet any cost increases in the cost of power station decommissioning after power generation has taken place.

17. While the Government could give generalised comfort to the banks without legislative cover, and (iii) is covered by Schedule 12 of the Electricity Act, I am advised that contractual commitment under (i) and (ii) could not be given without primary legislation. The overwhelming disadvantage of this approach is that it does nothing to control the costs of nuclear power, which are at the root of the difficulty in which we find ourselves. And of course it would leave the taxpayer with liabilities, while the private sector took the profits - an accusation frequently levelled at us by our political opponents during the passage of the Electricity Bill.

PWRs

18. We had two objectives in encouraging the CEGB's wish to build a "small family" of PWRs. The first was to maintain diversity of electricity supply. Things have changed since we first considered the PWR programme.

(i) A key point was the need to replace Magnox stations as they were retired during the 90s. It now seems likely, subject always to the views of the NII, that quite a

few of the Magnox stations may have the potential safely to achieve lives of 35 years without major capital expenditure. This could give a significant increment of up to 2.6GW, equivalent to slightly more than 2 PWRs, of nuclear capacity from that source during the mid to late 1990s compared with previous expectations . With experience it will be possible to assess in due course whether longer lives might be achieveable.

(ii) It is now clear that there are ample supplies of gas on the UKCS and elsewhere which could be used for power generation. Our policy of competition in electricity generation is encouraging a host of new independent projects, most of which are gas fired. The Lakeland project recently signed up is a good example. This could become an important source of diversity.

(iii) Oil fired generation is a key source of diversity which played a vital role in the defeat of the miners' strike in 1984-85. Large modern oil stations generated 63Twh, compared with 37Twh from nuclear. Oil burn could displace up to 50 million tonnes of coal in an emergency.

(iv) French supplies, which were not yet available when we

defeated the miners in 1984-85, are now coming in at a rate equivalent to around a third of CEGB nuclear generation (12.6Twh in 1987-88, compared with nuclear generation of 32.8Twh). These supplies are predominantly nuclear.

(v) To the extent that the generators import more coal in the future than would have been the case under the CEGB-British Coal Joint Understanding, diversity is increased, and the power of the NUM reduced.

Taken together, English nuclear power and French supplies, even without a contribution from the 3 follow-on PWRs should provide 20% of electricity requirements in England and Wales in the year 2000.

19. Our second objective was to keep the nuclear option open for the longer term. While we recognised that nuclear was not at present the economic choice, we did not have at our disposal the figures now put forward by NP which show PWR prices as at least twice as high as fossil prices for the foreseeable future.

20. It was our intention that the 3 post Sizewell B PWRs should be contracted for before vesting, on the grounds that we would not be able to ensure this subsequently, and the position needed to be clear for the prospectuses for both distcos and generators.

Bank finance is not available for these stations. This, and the prices that NP is proposing, show that the private sector is not willing to proceed with these uneconomic projects.

21. The market message is that the private sector will only build PWRs if the output is sold at very high prices and with Government taking virtually all the risk. This cannot be acceptable to us. In these circumstances the best way to keep the nuclear option open is to keep it under Government control. In view of the alternative diversity factors set out in paragraph 18, the need to encourage competition in generation, and of the substantial public expenditure implications, I would recommend that we should not ask the proposed Government company to proceed with the 3 post Sizewell B PWRs for some years, and that this should be made clear when I announce our policy on nuclear power. Not proceeding with these 3 stations would have substantial advantages for our other policies, leaving more room for independent generators to offer new baseload capacity, almost certainly gas fired. This competition would exert downward pressure on prices while improving diversity.

AGRs

22. The English AGRs exist, and in spite of the disastrous record of 3 of them, need to be operated as efficiently as possible. We have commissioned an independent scrutiny of these

stations by Mr Collier, Chairman of the UKAEA. Mr Collier's best estimate of AGR output rises from around 20Twh pa (the expectation for this year) in the early 1990s to 33Twh pa later in the decade. He assumes that necessary capital expenditure is carried out, which he suggests might amount to over £100 million on the five stations over the decade. NP's latest indications are more pessimistic, indicating a settled-down central estimate in the range 28 to 30Twh pa. There are clearly substantial uncertainties here. Privatising these stations, having removed Magnox from NP, would not make sense.

OPTIONS

(i) JOINT COMPANY

23. A holding company owned by the Government would own the nuclear power assets, with an operating company jointly owned by Government and National Power which would run the stations, and employ the staff. This might have advantages from the point of view of the career management of staff and would maintain NP as a nuclear company. It would however be important to ensure that the lines of management responsibility were clear in order to satisfy the NII about the safety arrangements.

24. However, our advisers are strongly opposed to this option. They point out that uncertainty among investors about the extent

of nuclear liabilities on NP's part would cloud investors' perception of the company and put its flotation at risk. In any case, a joint company would be immensely complicated: NP would have to be consulted on all major issues and could take the opportunity for wrecking tactics.

(ii) GOVERNMENT OWNED COMPANY

25. We are already setting up under the Electricity Act a special Government owned CEGB successor company to hold the Magnox stations. If the company were enlarged to take in all National Power's nuclear activities, the difficulties associated with splitting the nuclear assets would be removed. Some splitting of other NP functions (eg financial and commercial) would still be needed. A strong management team would be needed to get the best return for the taxpayer out of these costly assets, and to maintain this important source of UK nuclear expertise.

26. The electricity unions are opposed to privatisation in principle, but committed to getting the best possible deal for their members. The leadership is keen to be involved in discussions about issues which affect their members - pensions, employee shares, job security. Their reaction to the Magnox statement so far has been to make little adverse public comment, but to exert strong pressure for talks about how to carry through

my predecessor's commitment to protect the staff. Any new arrangement must extend that commitment to all the staff involved. I will need to carry the unions with me: if they opposed the new scheme, we would have serious difficulties.

NFFO, LEVY AND PUBLIC EXPENDITURE

27. The NFFO and fossil fuel levy would remain in place, but the obligation would be set at a level consistent with my proposals for nuclear capacity. The Area Boards would meet the obligation by contracting directly for supplies from the nuclear company and elsewhere, with the extra costs they incur recovered through the levy. The prices will need to be negotiated within the next month, in line with the fossil contracts.

28. Contract conditions will need to be settled and there will need to be further examination of costs. But I would envisage average nuclear prices at vesting of the order of those anticipated in my predecessor's letter of 14 June. These prices would be broadly consistent with an 8% rate of return on CCA assets, in line with what is required generally for nationalised industry investment. This compares with the 14% project return sought by NP.

29. If prices were pushed down further so that the nuclear company did not cover its costs, including a reasonable return on

assets, this would in effect result in a subsidy from taxpayer to electricity customer. There would be a public expenditure impact, and difficult questions to answer from the Commission.

30. If prices were set broadly at the level I propose and taking account of capital expenditure on Sizewell B, I would expect the company to have a positive cashflow, at least for the next few years. My officials will prepare more precise estimates as more detailed figures become available.

PROCEEDS

31. The impact on the proceeds of the sale of NP is complex. My advisers' initial view is that the value of the assets to be sold would be enhanced by their not being associated with nuclear power. My advisers will be preparing revised forecasts when more detailed figures are available.

LORD MARSHALL'S VIEWS

32. I have discussed prices and financing with Lord Marshall. He reminded me that he had warned the Government two years ago that in his view under the form of privatisation the Government was proposing, nuclear power was dead. A major element in the price of PWR was capital charges. In the competitive situation the Government was seeking for the electricity industry, high

returns were required because of the risks. A vertically integrated utility with a monopoly and the ability to pass unexpected costs straight through to the customer would be able to raise funds more cheaply, and thus the cost of the power could be lower. The proposed prices could be reduced by changes of assumptions, such as writing off the capital over 40 years, instead of 20, and by comfort being given by the Government to the banks. But the conclusion was that PWRs could only be financed in the private sector at uncomfortable electricity prices.

33. On AGR prices, Lord Marshall acknowledged that depreciation and profit were major items in the price make-up which could be re-examined. A distinction could be drawn between Heysham II and Hinkley Point B, which were similar to the 2 Scottish stations and functioned reasonably well, and Dungeness B, Hartlepool and Heysham I, the performance of which continues to be highly unsatisfactory. His staff have since supplied the lower range of AGR prices which I have been quoting in this paper.

TIMETABLE

34. The timetable for privatisation is very tight. The new structure of the industry must be vested and operating by 31 March 1990 if the flotation timetable is to be met. In terms

of the nuclear stations, the critical tasks to be carried out by vesting fall under two main headings:

(a) contracts and prices: to achieve vesting by 31 March, the Area Boards, National Power, PowerGen and the Scottish companies must be able to publish tariff proposals and start negotiating contract prices with customers in January. Before they do so, we will have to satisfy ourselves in December that their proposals will result in acceptable capital structures for all seventeen companies. This means that agreement on the prices of coal, and of nuclear and conventional electricity, as well as the size of the nuclear levy, will all have to be settled by the beginning of December. To achieve that, sensible proposals for nuclear prices must be tabled as soon as possible, preferably no later than 10 November;

(b) reorganisation: our analysis of the tasks necessary to establish a Magnox company shows that it will require speedy decisions to achieve vesting of a new Government owned nuclear company by 31 March. Essential tasks include recruiting a Board and key staff, allocating assets and employees, setting up new management systems; sorting out pension rights and other means of implementing the commitment given on 24 July to protect

staff interests, and establishing the opening balance sheet and tax position. Establishing a single nuclear company should be less problematic than Magnox was becoming, since the problems of splitting nuclear resources between Magnox stations and the AGRs and PWRs will not arise. But early decisions are essential if the Board is to have any say in decisions on nuclear prices and in concluding contracts with BNFL for fuel cycle services.

CONCLUSION

35. The complications of dealing with NP's entrenched opposition to losing control of Magnox are in themselves a serious threat to the timetable. The 3 post Sizewell B PWRs can only be built in the private sector if the Government takes measures tantamount to financing them itself. The achievement of reasonable AGR prices in NP's hands depends on accepting their demands for extensive Government support.

36. I have considered whether we should take the opportunity to review the split of assets between NP and PowerGen (PG). However, if we were to revisit that issue, the objective of privatisation this Parliament would be lost.

37. I am mindful that not privatising nuclear power in England and Wales may necessitate re-examination of the plans for Scottish privatisation. That is for the Secretary of State for Scotland to consider, but I see no reason why the difficulties of financing PWRs in England and Wales need cause insuperable problems for the ESI in Scotland.

38. In my view, our best chance of achieving the objectives set out in paragraph 1 of this paper lies in removing nuclear power from the ambit of privatisation, through the Government owned company option described in paragraphs 25 to 30. I should be grateful for colleagues' early agreement.

PRIME MINISTER P 03571

ELECTRICITY PRIVATISATION AND NUCLEAR POWER

[Minute of 3 November from Secretary of State for Energy]

DECISIONS

1. Mr Wakeham proposes that nuclear power should be removed from the ambit of electricity privatisation and retained in the public sector in a wholly-owned Government company. He also proposes that the Government should make it clear publicly that it will not proceed with the three post-Sizewell PWRs "for some years". His proposals would reverse an important feature of electricity privatisation, which he as well as Mr Parkinson has affirmed, and would raise major questions about nuclear power policy. You will wish to work through the issues carefully, to establish precisely what the problems and constraints are; and then decide whether more work is needed or whether Mr Wakeham should proceed with an early announcement as he proposes.

2. Depending on what you decide, you will also wish to consider the position of Scotland. At present privatisation of the electricity industry in Scotland is going ahead on the basis that nuclear power stations will be included. If Mr Rifkind wishes to continue on this basis, there will need to be a rationale for the different treatment.

3. On handling:

i. if there is to be an early announcement you will wish to agree with Mr Wakeham when it should be and invite him to report to Cabinet beforehand. Our understanding is that he has it in mind to make the announcement this coming Thursday, 9 November.

ii. if you commission more work, you will wish to agree

the timetable.

MAIN ISSUES

4. The issues are complex. You might find it helpful to divide the discussion into three parts.

i. what are the reasons for making such a major policy reversal?

ii. what are the main options now open to Government?

iii. is it necessary to make an announcement about the post-Sizewell PWRs now?

Reasons for reversing the policy

5. The core of the case for retaining nuclear power in the public sector is that it will not be possible to finance the PWRs in the private sector without "far reaching Government protection".

6. It is clear from the paper that the Department are having a difficult time in their negotiations with National Power. What is less clear is how far the arguments for not privatising nuclear power reflect insuperable obstacles in their own right, as opposed to serious negotiating difficulties. You may wish to go through the main problem areas one by one.

The economics of the PWR

7. National Power say in effect that the banks will only finance Sizewell and the later PWRs if the Government takes virtually all the risks.

i. cost. There is no quantification of what the Government's liability would be if it accepted the risks. You may want to ask.

ii. support. The paper says that even if all risk was removed from National Power and the banks, the PWR programme is still uneconomic and requires Government support, with "far-reaching" guarantees against their withdrawal. There are no figures for this assistance. You may want to ask.

iii. attitude of the banks. You may wish to explore what lies behind the banks' attitude. Quite apart from Government commitments, the ability of the industry to pass costs through to the consumer via the nuclear levy should provide reassurance that costs can be recovered.

iii. the Department's advisers. This assessment of the attitude of the banks comes from National Power and reflects soundings taken by their advisers. You may wish to ask what the Department's advisers think.

iv. how far is this negotiation? It is obviously in the interests of National Power and the banks to leave Government with as much of the liability for nuclear power and to ask for as much support as they can secure. But they may not want to press it to the point of leaving nuclear power in the public sector. Is there a chance that they might moderate their demands on Government in order to retain nuclear power as part of the privatisation exercise? Are they aware of what Mr Wakeham is now proposing? You may wish to ask for Mr Wakeham's assessment.

Nuclear fuel

8. The paper says that Lord Marshall is insisting that the public sector should own the fuel for AGRs and PWRs, thus taking on responsibility for the waste management and disposal consequences. There is no quantification of the cost. You may want to ask whether this might be negotiable.

The price of nuclear electricity

9. The paper reports substantial increases in the price of electricity from PWRs. National Power's lower range starts at 7.3p/kwh in 1996-97 falling to about 6.8p/kwh by 2000-01. This compares with the figures which they quoted to the Hinkley Inquiry of 4.13p/kwh. You may wish to discuss the reasons for these figures including the assumptions which National Power are making about:

i. the rate of return in the private sector compared with the public sector which adds over 1p/kwh to the Hinkley cost even though the banks are asking to be relieved of risk;

ii. the future trend in capital costs where National Power are pleading that the civil construction boom is pushing costs up;

iii. the overheads of nuclear power which Mr Wakeham says "are being taken more fully into account", adding 0.7p/kwh.

Magnox

10. Mr Wakeham says that "the Magnox situation cannot be resolved in a satisfactory manner." You may wish to explore how serious the problems are.

i. safety. We understand that one difficulty is that the Nuclear Installations Inspectorate insist on there being a single chain of responsibility from the top of the company holding the site licence down to its day-to-day operation. The problem is to find a way of keeping the Magnox assets and the site licence in the public sector while allowing National Power to operate it. Mr Wakeham is seeking a way forward through a joint company approach.

ii. attitude of National Power. Mr Wakeham says that National Power want to secure most of the benefits of the

stations and that their whole-hearted co-operation cannot be assured. You may want to ask what lies behind this.

iii. timetable. Mr Wakeham says that the problems of the Magnox stations may anyway not be achievable within the privatisation timetable. Keeping all the nuclear assets in the public sector, rather than having to split them, would remove the difficulty.

Options

11. Mr Wakeham's preferred option is for a Government-owned company to own and operate all nuclear power stations. He believes that it would be "cash-positive" and that the unions would concentrate on getting the best deal for their members. The Non-Fossil-Fuel Obligation and fossil-fuel levy would be kept in place but would be set at a level consistent with Mr Wakeham's proposals for nuclear capacity. You may want to ask about:

i. legislation. Is it clear that this can be brought about without legislation? Who would own the company?

ii. attitude of the unions. Mr Wakeham says that he will need to carry the unions with him and that it would cause serious difficulties if they opposed the new scheme. How confident is he that he can?

iii. attitude of National Power. Setting up a public sector nuclear company would presumably mean some sort of reorganisation of National Power in order to split off the assets and separate the staff. Would they cooperate?

Accounting approach to prices

12. The paper outlines another possibility which would be to proceed with privatisation, pressing National Power to reduce the costs implicit in their prices, to write down the asset value of the AGRs and to write off a proportion of the expenditure

incurred to date on Sizewell. Mr Wakeham says that this might produce an initially acceptable level of nuclear prices but that it would suffer drawbacks:

i. National Power and the banks would still want major extensions of Government support. But the Government would have to bear the cost if the nuclear assets were kept in the public sector as he proposes;

ii. we would remain open to prevarication from National Power which would put the timetable at risk. But may this not be a problem anyway, even if the nuclear assets are to be kept in the public sector?

iii. no more PWRs beyond Sizewell would be built ~~unless~~ by a private sector company unless there were a substantial improvement in their economics. But he is himself proposing that if nuclear power is kept in the public sector there should be no more PWRs "for some years".

You will wish to decide whether this is an option on which further work might be done.

Announcement about the post-Sizewell PWRs

13. Mr Wakeham proposes to announce that the Government will not proceed with the three post-Sizewell PWRs for some years. He bases this on changes in the arguments about diversity of supply, the need to encourage competition in generation and the public expenditure implications. This would be a major reversal of the Government's nuclear power policy, repeated on many occasions including the Sizewell and Hinkley Inquiries and in Parliament. The paper gives no assessment of the implications of such a decision for the nuclear industry and their ability to replicate nuclear stations in the future without an ordering programme. Would it effectively kill off the nuclear option? You may wish to ask whether this decision needs to be taken at this time. If it

does, you may wish to ask for a full analysis to be circulated setting out the arguments in more detail.

Other aspects

14. There are a number of practical points which you may wish to raise:

i. Lord Marshall. You may wish to discuss how the CEGB and in particular Lord Marshall, are likely to react to any decision to keep nuclear power in the public sector.

ii. Hinkley. If the Government proceeds as Mr Wakeham proposes, he will presumably need to decide what should be said to the Hinkley inquiry or indeed whether it should proceed. I understand that the CEGB will be giving further evidence, possibly on PWR costs, to them very soon.

iii. resources. One of the Department's problems is that it is working to a very tight timetable. Is there anything that could be done to speed things up by employing more outside resources eg. on the legal aspects?

RTJW.

R T J WILSON
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